

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-24. (cancelled)

25. (currently amended) A portable information processor that is attachable and detachable to a first device and a second device, and that is portable being detached from the first device and the second device, comprising:

a storage unit configured to store information;

a connecting unit configured to connect the portable information processor to either one of the first device and the second device;

an acquiring unit configured to acquire information from the first device and the second device;

a generating unit configured to be supplied with a driving power from a power source of the first device and the second device, and to generate operation information indicative of an operation executed by the first device and the second device, based on device identification information and other information that are acquired by the information acquiring unit, and on the information stored in the storage unit; and

a control unit configured to control one of the first device and the second device that is connected to the portable information processor, based on the operation information, wherein

the second device is installed in a mobile unit,
the second device includes a position detecting unit
configured to detect a current position of the mobile unit,

when the portable information processor is connected to the first device, the acquiring unit acquires first identification information that is the device identification information of the first device, and first acquired information that is the other information acquired from the first device, and

the storage unit stores the first acquired information and map information,

when the portable information processor is connected to the second device,

the acquiring unit acquires second identification information that includes navigation information that is the device identification information of the second device and second acquired information that is the other information including position information that indicates the current position of the mobile unit acquired from the second device,

the generating unit generates second operation information that includes navigation information that is the operation information of the second device executable by the second device, based on the second identification information, the second acquired information, and—the first acquired information stored in the storage unit and the map information, and

the control unit controls the second device based on the second operation information.

26. (currently amended) A portable information processor that is attachable and detachable to a first device and a second device that is installed indoors, and that is the portable information processor being portably portable being detached from the first device and the second device, comprising:

a storage unit configured to store information;
a connecting unit configured to connect the portable information processor to either one of the first device and the second device;
an acquiring unit configured to acquire information from the first device and the second device;

a generating unit configured to be supplied with a driving power from a power source of the first device and the second device, and to generate operation information indicative of an operation executed by the first device and the second device, based on device identification information and other information that are acquired by the information acquiring unit, and on the information stored in the storage unit; and

a control unit configured to control one of the first device and the second device that is connected to the portable information processor, based on the operation information, wherein

the second device is installed in a mobile unit,
the second device includes a position detecting unit
configured to detect a current position of the mobile unit,

when the portable information processor is connected to the first device, the acquiring unit acquires first identification information that is the device identification information of the first device, and first acquired information that is the other information acquired from the ~~second~~first device,

the generating unit generates first operation information that is the operation information of the first device, based on the first identification information, the first acquired information, and the information stored in the storage unit, and

the storage unit stores the first operation information and map information, and

when the portable information processor is connected to the second device,

the acquiring unit acquires second identification information that is the device identification information of the second device, and second acquired information that is the other information including position information that indicates the current position of the mobile unit~~acquired from the second device~~,

the generating unit generates second operation information that is the operation information of the second device and that includes at least navigation information, based on the second identification information, the second acquired information, ~~and on~~ the first operation information stored in the storage unit, and the map information, and

the control unit controls the second device based on the second operation information.

27. (currently amended) A portable information processor that is attachable and detachable to a plurality of devices including a mobile device installed in a mobile unit and an indoor device installed indoors, and that is portable being detached from the devices, comprising:

a storage unit configured to store information;

a connecting unit configured to connect the portable information processor to either one of the mobile device and the indoor device;

an acquiring unit configured to acquire information from the mobile device and the indoor device;

a generating unit configured to be supplied with a driving power from a power source of the mobile device and the indoor device, and to generate operation information indicative of an operation executed by the mobile device and the indoor device, based on device identification information and other information that are acquired by the information acquiring unit, and on the information stored in the storage unit; and

a control unit that controls one of the mobile device and the indoor device that is connected to the portable information processor, based on the operation information, wherein

the mobile device includes

a position detecting unit configured to detect a position of the mobile unit; and

a display unit,

the indoor device includes

an input unit through which command information is input by a user; and

a communication unit configured to communicate information with an information source,

the storage unit stores at least map information,
when the portable information processor is connected to
the mobile device,

the acquiring unit acquires the device
identification information of the mobile device, and position
information on a position of the mobile unit detected by the
position detecting unit,

the generating unit generates navigation
information for the mobile unit based on the map information, the
device identification information of the mobile device, and the
position information, and

the control unit causes the display unit to
display a navigation screen for the mobile unit based on the
navigation information,

when connected to the indoor device,

the acquiring unit acquires the device
identification of the indoor device and the command information,

the generating unit generates request information
for requesting predetermined information on navigation for the
mobile device, based on the device identification information of
the indoor device and the command information, and

the control unit causes the communication unit to
acquire the predetermined information from the information source
based on the request information.

28. (previously presented) The portable information processor according to claim 27, wherein when the portable information processor is connected to the indoor device,

the acquiring unit acquires the predetermined information, and

the storage unit updates the information stored therein based on the predetermined information.

29. (previously presented) The portable information processor according to claim 27, wherein

the indoor device further includes a display unit,

when the portable information processor is connected to the indoor device,

the generating unit generates presentation information to present a content of the information stored in the storage unit, and

the control unit causes the display unit of the indoor device to display a screen based on the presentation information.

30. (previously presented) The portable information processor according to claim 27, wherein when the portable information processor is connected to the indoor device,

the acquiring unit acquires map renewal command from the input unit,

the generating unit generates the request information to request map renewal information based on the map renewal command, and

the control unit causes the communication unit to acquire the map renewal information from the information source based on the request information.

31. (previously presented) The portable information processor according to claim 30, wherein

when the portable information processor is connected to the indoor device, the acquiring unit acquires the map renewal information, and the storage unit renews the map information based on the map renewal information, and

when the portable information processor is connected to the mobile device, the generating unit generates the navigation information based on the map information renewed.

32. (previously presented) The portable information processor according to claim 27, wherein when the portable information processor is connected to the indoor device,

the acquiring unit acquires route setting command from the input unit,

the generating unit generates request information to request route information for route setting based on the route setting command, and

the control unit causes the communication unit to acquire the route information based on the request information.

33. (previously presented) The portable information processor according to claim 32, wherein

when the portable information processor is connected to the indoor device, the acquiring unit acquires the route information, the generating unit generates route guidance information to enable the mobile device to perform route guiding to a destination based on the route information and the map information, and the storage unit stores the route guidance information, and

when the portable information processor is connected to the mobile device, the generating unit generates the navigation information based on the route guidance information.

34. (previously presented) The portable information processor according to claim 27, wherein

the indoor device further includes an indoor display unit, and

when connected to the indoor device,

the operation information generating unit generates presentation information that presents a content of the information stored in the storage unit, and

the control unit causes the indoor display unit to display an information presentation screen based on the presentation information.

35. (previously presented) A portable information processor that is attachable and detachable to a plurality of devices including a portable device portably carried by a user and an indoor device installed indoors, and that is portable being detached from the portable device and the indoor device, comprising:

a storage unit configured to store information;
a connecting unit configured to connect the portable information processor to either one of the portable device and the indoor device;

an acquiring unit configured to acquire information from the portable device and the indoor device;

a generating unit configured to be supplied with a driving power from a power source of the portable device and the indoor device, and to generate operation information indicative of an operation executed by the portable device and the indoor device, based on device identification information and other information that are acquired by the acquiring unit, and on the information stored in the storage unit; and

a control unit configured to control one of the portable device and the indoor device that is connected to the portable information processor, based on the operation information, wherein

the portable device includes

a position detecting unit configured to detect a position of the portable device; and

a display unit,

the indoor device includes

an input unit through which command information is input by the user; and

a communication unit configured to communicate information with an information source,

the storage unit stores at least map information,

when the portable information processor is connected to the portable device,

the acquiring unit acquires the device identification information of the portable device and position information on a position of the portable device detected by the position detecting unit,

the generating unit generates navigation information for the portable device based on the map information, the device identification information of the portable device, and the position information, and

the control unit causes the display unit to display a navigation screen of the portable device based on the navigation information,

when the portable information processor is connected to the indoor device,

the acquiring unit acquires device identification information of the indoor device from the indoor device and the command information from the input unit,

the generating unit generates request information to request predetermined information on navigation information for the portable device based on the device identification information of the indoor device and the command information, and

the control unit causes the communication unit to acquire the predetermined information from the information source based on the request information.

36. (previously presented) A portable information processor that is attachable and detachable to a plurality of devices including a mobile device installed in a mobile unit and a portable device portably carried by a user, and that is portable being detached from the mobile device and the portable device, comprising:

a storage unit configured to store information;

a connecting unit configured to connect the portable information processor to either one of the mobile device and the portable device;

an acquiring unit configured to acquire information from the mobile device and the portable device;

a generating unit configured to be supplied with a driving power from a power source of the mobile device and the portable device, and to generate operation information indicative of an operation executed by the mobile device and the portable device based on device identification information and other information that are acquired by the acquiring unit, and on the information stored in the storage unit; and

a control unit configured to control one of the mobile device and the portable device that is connected to the portable information processor, based on the operation information, wherein

the mobile device includes

a first position detecting unit configured to detect a position of the mobile device; and

a first display unit,

the portable device includes

a second position detecting unit configured to detect a position of the portable device; and

a second display unit,

the storage unit stores at least map information,

when the portable information processor is connected to the mobile device,

the acquiring unit acquires device identification information of the mobile device from the mobile device and first position information on a position of the mobile device detected by the first position detecting unit,

the generating unit generates first navigation information for the mobile unit based on the map information, the device identification information of the mobile device, and the first position information, and

the control unit causes the first display unit to display a navigation screen for the mobile unit based on the first navigation information,

when the portable information processor is connected to the portable device,

the acquiring unit acquires the device identification information of the portable device from the portable device and second position information on a position of the portable device detected by the second position detection unit,

the generating unit generates second navigation information for the portable device based on the map information, the device identification information of the portable device, and the second position information, and

the control unit causes the second display unit to display a navigation screen for the portable device based on the second navigation information.

37. (previously presented) The portable information processor according to claim 36, wherein

the devices further include an indoor device installed indoors,

the indoor device includes an input unit through which command information is input by the user,

when the portable information processor is connected to the indoor device,

the acquiring unit acquires the device identification information of the indoor device from the indoor device and route setting command from the input unit,

the generating unit generates first route guidance information for the mobile device to perform a route guiding and second route guidance information for the portable device to perform route guiding based on the map information, the device identification information of the indoor device, and the route setting command, and

the storage unit stores the first route guidance information and the second route guidance information,

when the portable information processor is connected to the mobile device, the generating unit generates the first navigation information based on the map information, the device identification information of the mobile device, the first position information, and the first route guidance information,

when the portable information processor is connected to the portable device, the generating unit generates the second navigation information based on the map information, the device identification information of the portable device, the second position information, and the second route guidance information.

38. (previously presented) A portable information processor that is attachable and detachable to a plurality of devices including a mobile device installed in a mobile unit and an indoor device installed indoors, and that is portable being detached from the devices, comprising:

a storage unit configured to store information;

a connecting unit configured to connect the portable information processor to either one of the mobile device and the indoor device;

an acquiring unit configured to acquire information from the mobile device and the portable device;

a generating unit configured to be supplied with a driving power from a power source of the mobile device and the indoor device, and to generate operation information indicative of an operation executed by the mobile device and the indoor device based on device identification information and other information that are acquired by the acquiring unit, and on the information stored in the storage unit; and

a control unit configured to control one of the mobile device and the indoor device that is connected to the portable information processor, based on the operation information, wherein

the mobile device includes a first sound output unit,
the indoor device includes an second sound output unit,
the storage unit stores sound information, first environment information indicating reproduction environment of the mobile device and second environment information indicating reproduction environment of the indoor device,

when the portable information processor is connected to the mobile device,

the acquiring unit acquires the device identification information of the mobile device from the mobile device,

the generating unit generates first audio information for the mobile unit based on the sound information, the first environment information, and the device identification information of the mobile device, and

the control unit causes the first sound output unit to output sound based on the first audio information,

when portable information processor is connected to the indoor device,

the acquiring unit acquires the device identification information of the indoor device from the indoor device,

the generating unit generates second audio information based on the sound information, the second environment information, and the device identification information of the indoor device, and

the control unit causes the second sound output unit to output sound based on the second audio information.

39. (previously presented) The portable information processor according to claim 38, wherein

the indoor device further includes an input unit through which command information is input by a user,

when portable information processor is connected to the indoor device,

the acquiring unit acquires environment renewal command from the input unit,

the generating unit generates environment renewal information to renew any one of the first environment information and the second environment information based on the environment renewal command, and

the storage unit renews any one of the first environment information and the second environment based on the environment renewal information.

40. (previously presented) The portable information processor according to claim 38, wherein

the indoor device further includes an input unit through which command information is input by a user; and

a communication unit that communicates information with an information source,

when the portable information processor is connected to the indoor device,

the acquiring unit acquires sound renewal command from the input unit,

the generating unit generates request information to request sound renewal information based on the sound renewal command, and

the control unit causes the communication unit to acquire the sound renewal information based on the request information.

41. (previously presented) The portable information processor according to claim 40, wherein

when the portable information processor is connected to the indoor device,

the acquiring unit acquires the sound renewal information, and

the storage unit renews the sound information based on the sound renewal information, and

when the portable information processor is connected to the mobile device, the generating unit generates the first audio information based on the sound information renewed.

42. (previously presented) A portable information processor that is attachable and detachable to a plurality of devices including a portable device portably carried by a user and an indoor device installed indoors, and that is portable being detached from the devices, comprising:

a storage unit configured to store information;

a connecting unit configured to connect the portable information processor to either one of the portable device and the indoor device;

an acquiring unit configured to acquire information from the portable device and the indoor device;

a generating unit configured to be supplied with a driving power from a power source of the portable device and the indoor device, and to generate operation information indicative of an operation executed by the portable device and the indoor device, based on device identification information and other information that are acquired by the acquiring unit, and on the information stored in the storage unit; and

a control unit configured to control one of the portable device and the indoor device that is connected to the portable information processor, based on the operation information, wherein

the portable device includes a first sound output unit,

the indoor device includes an second sound output unit,

the storage unit stores sound information, first environment information indicating reproduction environment of the portable device, and second environment information indicating reproduction environment of the indoor device,

when the portable information processor is connected to the portable device,

the acquiring unit acquires the device identification information of the portable device from the portable device,

the generating unit generates first audio information based on the sound information, the first environment information, and the device identification information of the portable device, and

the control unit causes the first sound output unit to output sound based on the first audio information,

when the portable information processor is connected to the indoor device,

the acquiring unit acquires the device identification information of the indoor device from the indoor device,

the generating unit generates second audio information based on the sound information, the second environment information, and the device identification information of the indoor device, and

the control unit causes the second sound output unit to output sound based on the second audio information.

43. (previously presented) A portable information processor that is attachable and detachable to a plurality of devices including a mobile device installed in a mobile unit and a portable device portably carried by a user, and that is portable being detached from the devices, comprising:

a storage unit configured to store information;

a connecting unit configured to connect the portable information processor to either one of the mobile device and the portable device;

an acquiring unit configured to acquire information from the mobile device and the portable device;

a generating unit configured to be supplied with a driving power from a power source of the mobile device and the portable device, and to generate operation information indicative of an operation executed by the mobile device and the portable device based on device identification information and other information that are acquired by the acquiring unit, and on the information stored in the storage unit; and

a control unit configured to control one of the mobile device and the portable device that is connected to the portable information processor, based on the operation information, wherein

the mobile device includes a first sound output unit,
the portable device includes a second sound output unit,

the storage unit stores sound information, first environment information indicating reproduction environment of the mobile device, and second environment information indicating reproduction environment of the portable device,

when the portable information processor is connected to the mobile device,

the acquiring unit acquires the device identification information of the mobile device from the mobile device,

the generating unit generates first audio information based on the sound information, the first-environment information, and the device identification information of the mobile device, and

the control unit causes the first sound output unit to output sound based on the first audio information,

when the portable information processor is connected to the portable device,

the acquiring unit acquires the device identification information of the portable device from the portable device,

the generating unit generates second audio information based on the sound information, the second environment information, and the device identification information of the portable device, and

the control unit causes the second sound output unit to output sound based on the second audio information.

44. (currently amended) A portable information processor that is attachable and detachable to a plurality of devices including a mobile device installed in a mobile unit and an indoor device installed indoors, and that is portable being detached from the devices, comprising:

a storage unit configured to store information;

a connecting unit configured to connect the portable information processor to either one of the mobile device and the indoor device;

an acquiring unit configured to acquire information from the mobile device and the portable device;

a generating unit configured to be supplied with a driving power from a power source of the mobile device and the indoor device, and to generate operation information indicative of an operation executed by the mobile device and the indoor device based on device identification information and other information that are acquired by the acquiring unit, and on the information stored in the storage unit; and

a control unit configured to control one of the mobile device and the indoor device that is connected to the portable information processor, based on the operation information, wherein

the mobile device includes a first sound output unit,

the indoor device includes

an input unit through which command information is input by a user; and

a communication unit that communicates information with an information source,

the storage unit stores at least sound information,

when the portable information processor is connected to the mobile device,

the acquiring unit acquires the device identification information of the mobile device from the mobile device,

the generating unit generates first audio information based on the sound information and the device identification information of the mobile device, and

the control unit causes the first sound output unit to output sound based on the first audio information,

when the portable information processor is connected to the indoor device,

the acquiring unit acquires the device identification information of the indoor device from the indoor device and the command information from the input unit,

the generating unit generates a request for predetermined information ~~for-on~~ first audio information based on the device identification information of the mobile device and the command information, and

the control unit causes the communication unit to acquire the predetermined information from the information source based the request information.

45. (previously presented) The portable information processor according to claim 44, wherein when the portable information processor is connected to the indoor device,

the acquiring unit acquires the predetermined information, and

the storage unit renews the information stored in the storage unit based on the predetermined information.

46. (previously presented) The portable information processor according to claim 44, wherein

when connected to the indoor device,

the information acquiring unit acquires a sound information editing command from the input unit,

the operation information generating unit generates editing information based on the sound information editing command, and

the storage unit performs editing of the sound information based on the editing information, and

when connected the mobile device, the operation information generating unit generates mobile audio information based on the edited sound information.

47. (currently amended) A portable information processor that is attachable and detachable to a plurality of devices including a portable device portably carried by a user and an indoor device installed indoors, and that is portable being detached from the devices, comprising:

a storage unit configured to store information;

a connecting unit configured to connect the portable information processor to either one of the portable device and the indoor device;

an acquiring unit configured to acquire information from the portable device and the indoor device;

a generating unit configured to be supplied with a driving power from a power source of the portable device and the indoor device, and to generate operation information indicative of an operation executed by the portable device and the indoor device, based on device identification information and other information that are acquired by the acquiring unit, and on the information stored in the storage unit; and

a control unit configured to control one of the portable device and the indoor device that is connected to the portable information processor, based on the operation information, wherein

the portable device includes a first sound output unit,

the indoor device includes

an input unit through which command information is input by the user; and

a communication unit that communicates information with an information source,

the storage unit stores at least sound information and content information indicating a content of the sound information,

when the portable information processor is connected to the portable device,

the acquiring unit acquires the device identification information of the portable device from the portable device,

the generating unit generates first audio information based on the sound information and the device identification information of the portable device, and

the control unit causes the first sound output unit to output sound based on the first audio information,

when the portable information processor is connected to the indoor device,

the acquiring unit acquires the device identification information of the indoor device from the indoor device and the command information from the input unit,

the generating unit generates request information for the first audio information based on the device identification information of the indoor device and the command information, and

the control unit causes the communication unit to acquire predetermined information from the information source based on the request information.